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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,532	10/23/2001	Jakob Berg	344.797CIP	4170

7590 08/02/2005

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EXAMINER	
LERNER, MARTIN	
ART UNIT	**PAPER NUMBER**
2654	

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/047,532	BERG ET AL.	
	Examiner	Art Unit	
	Martin Lerner	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 to 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 to 15, 18, 20 to 21, and 27 to 28* is/are rejected.

7)☒ Claim(s) *16 to 17, 19, and 22 to 26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1 to 15, 18, 20 to 21, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by *Logan et al.*

Regarding independent claim 1, *Logan et al.* discloses a method of selectively reproducing segments of broadcast programming, comprising:

"storing a first media signal received by the receiving device, the media signal containing undesirable signal components" – receiver 12 is depicted as a FM radio receiver that receives broadcast programming signals ("a first media signal") transmitted as radio frequency (RF) signals (column 4, line 66 to column 5, line 11: Figure 1); data processor 16 can include a compression buffer ("storing") to receive the data signal (column 6, lines 9 to 24: Figure 1); segments of the broadcast signal are "talked over" (column 3, lines 20 to 29) and/or contain noise ("undesirable signal components") (column 12, line 66 to column 13, line 30);

"selecting a first search key in the first media signal" – computer memory 30 provides storage for identification signals, wherein each identification signal can be

representative of an identifying characteristic of a known portion of a broadcast signal (column 7, lines 23 to 30: Figure 1); comparator 50 searches the data signal representative of the broadcast programming signal for the occurrence of one or more of those known segments by identifying an identification signal stored within identification signal memory 64 and representative of the known segment (column 8, lines 39 to 44: Figure 2);

"searching other media signals for a second search key that is substantially identical to the first search key" – processor 60 can correlate that downloaded portion with one or more of the identification signals stored within the identification signal memory 64 (column 8, lines 50 to 54: Figure 2);

"comparing first segments of the first media signal occurring before and after an occurrence of the first search key with second segments of a second media signal occurring before and after an occurrence of the second search key" – a determination is made if an initial portion of a segment of a broadcast signal ("a first media signal") varies from the initial portion of the original version of a known segment ("a second media signal") (column 9, lines 31 to 38: Figure 2); correlator 62, upon detecting a match between the data signal in buffer processor 60 and one of the identification signals, can delimit a beginning and end for the segment associated with the respective identification signal (column 9, lines 6 to 26: Figure 2); the playback controller can include a search mechanism that detects marker signals between segments for searching between the stored segments (column 10, lines 35 to 38);

"identifying first common segments between the first segments and the second segments" – comparator can compare the introductory signal to the segment to generate a deviation between the broadcast programming signal and the introduction signal; this allows the apparatus to determine if the initial portion of the segment has been "talked over" by the announcer (column 9, lines 26 to 40); correlation of plural recorded program segments can be performed to combine the plural signals (column 13, lines 15 to 30); implicitly, segments not "talked over" are "first common segments".

Regarding claim 2, *Logan et al.* discloses combining recorded segments for two recordings, three recordings, and four recordings to reduce the signal-to-noise ratio (column 13, lines 1 to 15); implicitly, this involves comparing segments between at least three recorded segments.

Regarding claim 3, *Logan et al.* discloses recording and combining a particular program segment several times; by correlation of the plural recorded program segments, the signal-to-noise processor can combine ("linking") the plural signals to generate a single program segment recording ("a media signal segment") having improved audio fidelity (column 13, lines 1 to 30).

Regarding claims 4 and 5, *Logan et al.* discloses a user can download and search to identify songs of interest (column 7, lines 38 to 46); user identification involves "manually activating the device by a first activation member"; alternatively, agent software modules search through sources and identify identification signals that are of interest to a user (column 7, lines 46 to 55); an agent software module performs the task of "automatically activating the device" in response to a software program.

Regarding claim 6, *Logan et al.* discloses storing identification signals in an identification signal memory 64, and searching identification signals stored in identification signal memory 64 (column 8, lines 35 to 44: Figure 2).

Regarding claim 7, *Logan et al.* discloses a comparator can compare the introduction signal to the segment to generate a deviation signal ("a similarity factor") which represents the differences between the broadcast programming signal and the introduction signal (column 9, lines 31 to 34).

Regarding claim 8, *Logan et al.* discloses digital processor 14 selectively controls a digital sample rate for digitizing signals; by selectively controlling the sample rate of the output signal, the digital processor 14 allows the data processor 16 to reduce the file size with an associated loss of fidelity (column 5, lines 44 to 56: Figure 1); implicitly, comparing digital samples that are sampled at a lower sampling rate has the effect of comparing only every nth sample, where n is greater than 1.

Regarding claim 9, *Logan et al.* discloses that each recording can be made with a radio signal of approximately equal strength, or can be so adjusted by the signal processor (column 13, lines 9 to 14); adjustment of a strength of a signal so that all the signals are of equal strength is equivalent to "normalizing signal gain".

Regarding claim 10, *Logan et al.* discloses that a playback controller can provide segments as a function of an attribute signal; an attribute of the signal can be representative of a characteristic of the segment including its length (column 4, lines 13 to 19); correlation of plural recorded program segments can combine the plural signals to generate a single program segment recording (column 13, lines 26 to 30); thus,

signals can be selected and combined based upon signal length ("a longest signal segment").

Regarding claims 11 and 12, *Logan et al.* discloses the signal-to-noise processor collects and records a particular program segment several times (column 12, line 66 to column 13, line 15); implicitly, there is a counter or index representing the number of times a particular program segment is recorded when there are a plurality of copies of the segment.

Regarding claim 13, *Logan et al.* discloses the system could identify attributes for particular segments, such as one or more albums that have a recording of this segment (column 13, lines 30 to 38); attributes identifying the number of times a particular segment is recorded on a plurality of albums is equivalent to "counting a number of times a second search key is substantially identical to the first search key."

Regarding claim 14, *Logan et al.* discloses segment memory 52 stores segments to provide a database of selected segments (column 9, lines 47 to 49; column 10, lines 1 to 4); implicitly, a segment memory 52 stores segments in a form of a list of segments.

Regarding claims 15 and 18, *Logan et al.* discloses recording and combining a particular program segment several times; by correlation of the plural recorded program segments, the signal-to-noise processor can combine the plural signals to generate a single program segment recording having improved audio fidelity (column 13, lines 1 to 30); segment memory 52 stores segments to provide a database of selected segments (column 9, lines 47 to 49; column 10, lines 1 to 4); implicitly, a segment memory 52 stores segments in a form of a list of segments, so common segments identified by

signal-to-noise processor are also stored in a list; in one embodiment, a signal processor 78 includes a voice recognition process, identifies those portions of the data signal that are representative of speech signals, and deletes these segments from the data signal; alternatively, voice recognition can identify and save select attributes; thus, these selected attributes could be deleted speech signals stored as a list (column 11, line 65 to column 12, line 14).

Regarding claim 20, *Logan et al.* discloses a fade control to modulate the amplitude of a respective data signal to provide a fade-in effect that allows the detected musical selection to start from a reduced volume and grow louder after the "talked over" portion (column 9, lines 40 to 46).

Regarding claim 21, *Logan et al.* discloses recording and combining a particular program segment several times; by correlation of the plural recorded program segments, the signal-to-noise processor can combine the plural signals to generate a single program segment recording having improved audio fidelity (column 13, lines 1 to 30); a comparator can compare the introduction signal to the segment to a generate a deviation signal ("a similarity factor") which represents the differences between the broadcast programming signal and the introduction signal (column 9, lines 31 to 34); thus, there are a plurality of similarity factors between plural signals when they are combined to generate a single program segment.

Regarding claim 27, *Logan et al.* discloses combining record segments for two recordings, three recordings, and four recordings to reduce the signal-to-noise ratio

(column 13, lines 1 to 15); implicitly, this involves identifying at least four recordings that are substantially identical by at least four identification signals.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Logan et al.* in view of *Montlick et al.*

Logan et al. discloses adjustment of a strength of a signal so that all the signals are of equal strength (column 13, lines 9 to 14), which is equivalent to normalizing signal gain, but omits a specific gain normalization technique where a normalization factor is derived from a sum of absolute values of samples. However, it is known to normalize a signal according to a summation of signal magnitudes or energy values. Specifically, *Montlick et al.* teaches amplitude normalization, where an input converter block integrates ("a sum") the absolute value (i.e. magnitude) over a particular number of samples in a fixed time interval. (Column 7, Lines 29 to 55) It would have been obvious to one having ordinary skill in the art to utilize the amplitude normalization technique of *Montlick et al.* in a method of selectively reproducing segments of broadcast programming of *Logan et al.* because this is a well known method to adaptively determine a normalized gain within a predetermined time interval.

Allowable Subject Matter

5. Claims 16, 17, 19, and 22 to 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicants' arguments filed 05 July 2005 have been fully considered but they are not persuasive.

Firstly, Applicants argue that *Logan et al.* pre-stores uncorrupted media signal in order to remove undesirable signal components, but Applicants' invention initially stores a first media signal that contains undesirable signal components. Also, Applicants maintain that *Logan et al.* compares keys to search for deviations from an original, uncorrupted signal, while the invention searches for media signals with common segments. This position is not persuasive for the following reasons.

Logan et al. stores unknown broadcast signals in a compression buffer 42, and the unknown broadcast signals correspond to Applicants' claimed "a first media signal". (Figure 2) Segments of an unknown broadcast signal are "talked over" (column 3, lines 20 to 29) and/or contain noise, so these unknown broadcast signals contain "undesirable signal components". (Column 12, Line 66 to Column 13, Line 30) Then, *Logan et al.* compares these unknown broadcast signals to an original version of a known broadcast signal stored in identification signal memory 62. (Column 8, Lines 26

to 29: Figure 2) Thus, it is respectfully maintained that Applicants' characterization of *Logan et al.* is backwards: unknown broadcast signals stored in compression buffer 42 correspond to Applicants' initially stored first media signal, and known broadcast signals stored in signal memory 62 correspond to Applicants' second media signals.

Moreover, if deviations from an original signal are identified by *Logan et al.*, as admitted by Applicants, then it follows that the remainder are common segments. Once a "talked over" portion is identified as an undesirable signal component, any un-"talked over" portion must be a common segment. *Logan et al.* is concerned with storing selected segments without a "talked over" portion in a segment memory 62. (Column 9, Lines 47 to 49) An editing program allows a user to clip a segment and direct that segment to be stored by a recording element 80. (Column 10, Line 66 to Column 11, Line 1: Figure 3)

Furthermore, it is noted that Applicants' independent claim 1 does not expressly set forth limitations of "initially storing", as argued by Applicants. The language of the claims only says that a first media signal is stored, and does not preclude any prior storing of a second media signal.

Secondly, Applicants argue that *Logan et al.* uses a template that does not include any undesirable signals, whereas Applicants' invention captures a media signal that includes unidentified undesirable signals. Applicants' maintain that *Logan et al.* pre-records a song.

It is agreed that *Logan et al.* utilizes known broadcast signals, and that these known media signals could be called pre-stored templates, although the term

"templates" is not used by *Logan et al.* Instead of comparing two unknowns to generate a common portion, *Logan et al.* compares an unknown broadcast signal to a known broadcast signal to edit out any non-common portion. However, Applicants' claim language does not distinguish over *Logan et al.* The language of the claims refers only to "a first media signal" and "a second media signal", where a first media signal is stored. *Logan et al.* discloses an unknown broadcast signal, corresponding to Applicants' "first media signal", and a known broadcast signal, corresponding to Applicants' "second media signal", where the unknown broadcast signal is stored in a buffer 42. Thus, *Logan et al.* meets all the limitations of the invention as claimed. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Thirdly, Applicants argue that a pre-stored media signal being used as a template is not for identification of desirable signal components by *Logan et al.*, but for tailoring to user preferences. This position is traversed.

Logan et al. clearly discloses an object to permit editing of a radio broadcast signal to generate a proprietary radio program. (Column 2, Lines 9 to 11; Column 10, Line 66 to Column 11, Line 6) For *Logan et al.*, user preferences include playing back a selection that does not contain a portion that is "talked over". A modified data signal stored in memory 80 provides an audio signal that contains a reduced content of advertising, voice over, and other interruptions to the broadcast music program.

(Column 12, Lines 9 to 14) Thus, it clear that one of the objectives is to remove undesirable content from a music program in *Logan et al.*

Finally, Applicants argue that *Logan et al.* provides for a fade-in effect that allows the music to start with a reduced volume that grows louder during the presence of the unwanted signal components to, in effect, hide them. Applicants contrast this to the claimed invention, which only saves common segments of the signal. This position is traversed.

Both *Logan et al.* and Applicants' invention act equivalently to remove, or hide, undesirable signal components from an uncorrupted version. The fact that *Logan et al.* may have, in one embodiment, a fade-in effect to remove a portion that is "talked over" does not provide a distinguishing feature for Applicants' invention. If *Logan et al.* removes a "talked over" portion as identified by comparing an unknown to a known original, and saves the remainder, then this is the same as saving common segments. For *Logan et al.*, a portion that is "talked over" by an announcer is generally an initial portion, so a fade-in control modulates the amplitude to reduce the volume of a "talked over" initial portion.

Therefore, the rejections of claims 1 to 15, 18, 20 to 21, and 27 under 35 U.S.C. §102(b) as being anticipated by *Logan et al.*, and of claim 28 under 35 U.S.C. §103(a) as being unpatentable over *Logan et al.* in view of *Montlick et al.*, are proper.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (571) 272-7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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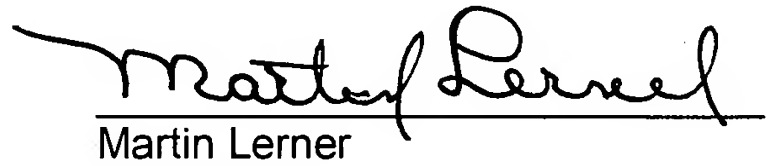

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